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ABSTRACT

A longitudinal follow-up study of career/technical students in British Columbia (BC) community colleges and technical institutes was conducted to determine the number of students who completed, withdrew from, or discontinued their studies; reasons for program non-completion; student opinions of the career/technical programs; and students' educational outcomes and employment patterns. A 30-item questionnaire was mailed to 9,941 former full- and part-time students who had been enrolled in fall 1981 at 17 BC colleges and who, due to graduation or withdrawal, were no longer enrolled in fall 1982. Study findings, based on responses from 4,727 (48%) of those surveyed, revealed that: (1) 41% of the college-age students attended to learn job skills, 20.3% to decide on a career, 12.8% to improve existing skills, and 7.5% for personal interest; (2) 22.5% of the adult students attended college to learn job skills, 35.5% to improve existing skills, 15.3% for personal interest, and 13.5% to complete a certificate; (3) 59% of the students surveyed had work experiance related to their program prior to enrollment, and 57% were employed full-time while enrolled; (4) 77% of the respondents were employed at the time of the survey; (5) 24% indicated there was no relationship between their employment and their training, and 22% indicated that their training was not useful to them in performing their job; and (6) family obligations and financial problems were the most frequently cited reasons for withdrawal. (HB)

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A LONGITUDINAL FOLLOW-UP SURVEY OF STUDENTS FROM CAREER/TECHNICAL PROGRAMS IN BRITISH COLUMBIA COMMUNITY COLLEGES AND INSTITUTES

Summary Report

Prepared for:

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Post-Secondary Department
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NOTE

This document is a summary of the much more comprehensive "Technical Report" prepared during the Longitudinal Follow-Up Survey of students from Career/Technical Programs. *

While the summary focusses on many of the highlights of the major report, it is impossible to convey the considerable variations which occur in the responses by program and by institution.

Reading the summary report cannot substitute for the detailed analysis provided in the original study.

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* For further detailed results, see:

Forrester, G.C., Jones, G., and Dennison, J.D. A Longtudinal Follow-Up Survey of Students from Career/Technical Programs in British Columbia Community Colleges and Institutes: Technical Report. Vancouver, British Columbia: B.C. Research, October 1983.

1.0 INTRODUCTION

1.1 Background

The post-secondary educational system of British Columbia includes a network of fifteen community colleges and six provincial institutes as well as three public universities. The community colleges offer a comprehensive curriculum, which includes academic courses, career/technical programs, vocational programs, upgrading and adult basic education, and continuing education. The provincial institutes are more specialized in curricular design, offering technical and technological courses and programs which are essentially employment oriented.

As of October, 1981, a total of 64,863[1] students were enrolled within the college and institute system in British Columbia. Of this total, 28,408 students were involved in career/technical programs or courses. This cohort represents 44% of the total non-university, post-secondary population.

Formal studies of students in the career/technical programs have been minimal in British Columbia. As these programs represent such a large proportion of the total enrolments of the colleges and institutes, it is appropriate that research be focused upon these students. Such research should provide data which includes insights into the extent of student demand for courses; the characteristics of the students who enrol in these programs; the student flow through the educational system; and the degree of student satisfaction and job placement following completion of their studies.

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[1] Management Services Division, B.C. Post-Secondary Enrolment Statistics 1982-83. Ministry of Education, Province of British Columbia, Victoria, B.C., May 1983, Table 11.

This study is but one component of a much larger project which began in the fall of 1981.[2] At that time the population under review was the students enrolling for the first time in career/technical programs in the colleges and institutes. Initial work included an investigation of enrolment patterns, which provided data on the extent to which students made application to more than one institution, or to more than one program,[3] and it included a survey of the characteristics of the students who actually enrolled that fall in the various institutions.[4] This latter survey compiled data on such matters as educational goals and aspirations, intentions regarding future employment and students' socio-economic backgrounds.

The component of the overall study addressed in the current report is a follow-up survey of students approximately 10 months after they have left their post-secondary institution. It focuses upon those students who were enrolled in the post-secondary educational system in the fall of 1981, but who were no longer enrolled in September 1982. Given this focus, it includes a large cohort of those students who had first entered their programs in 1981 and who were surveyed in the earlier components of the overall study. Hence, the follow-up survey reported here provides an opportunity to take a longitudinal view of data from the same population group, at the time of their initial entry and again some 10 months after leaving their studies. This aspect provided information which had not been available before.

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[2] A Study of Career/Technical Students in British Columbia, B.C. Research, 1981. The study is being undertaken by B.C. Research under sponsorship from the B.C. Ministry of Education and the Academic Council of British Columbia.

[3] A Study of Student Applications for Enrolment in Career/Technical Programs Throughout British Columbia, B.C. Research, 1982.

[4] A Profile Study of Students Entering Career/Technical Programs in the British Columbia Colleges and Institutes, B.C. Research, 1982.

1.2 Procedure

The methodology used in this study first involved a comparison of the enrolment files of all career/technical programs in 17 of the 19 colleges and institutes[5] offering such programs in the Province. The comparison of enrolment files was done to determine which students, who had been enrolled as of September 1981, were no longer enrolled one year later, in September 1982. This population included both full-time and part-time students, at all stages of their programs. Thus, it included those who had graduated, withdrawn from, or otherwise left the institution during the one year period.

With the "target" population so identified, an Information Sheet containing 30 items was mailed to 9,941 former students. The information requested was based on the objectives of the study which are reported in the next section. A response was received from 4,727 students, 48% of the population. However, the Post Office reported 1,573 mailings as undeliverable. Based on this information, the effective response rate was 57%. There was a range in effective response rates by institution of 44% to 64% and by program of 46% to 85%. An additional 228 returns from a similar follow-up survey being conducted by Vancouver Community College were also available to the provincial study thereby providing a total of 4955 responses. The data were summarized, treated to statistical analysis and reported as shown in the section on results.

1.3 Objectives

The overall goal of the study outlined in this report was to collect basic, student-based information which would be helpful to

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[5] Two institutions, for different reasons, did not participate in the study.

both provincial and institutional planning of career/technical programs. Specifically, this included the following four objectives:

1. to monitor the number of students who complete, withdraw or discontinue studies;

2. to identify the reasons for non-completion of a career/technical program, relating these to the stated original objectives through linkage of follow-up results with results from earlier phases of the overall project;

3. to collect opinions and measures relating to the effectiveness and value of the career/technical programs as perceived by the students;

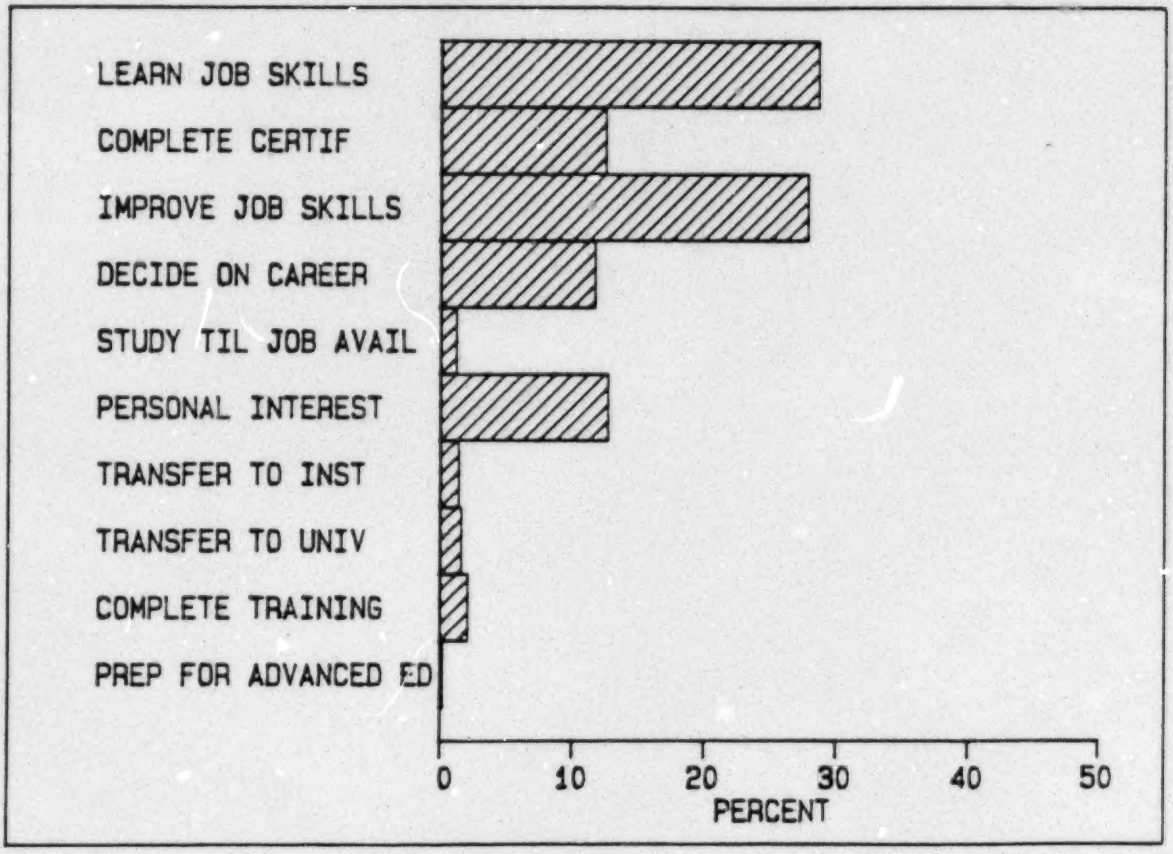
4. to determine students' experiences in finding employment after graduation or discontinuation of studies, including employment status, types of employment and the relationship between program followed and employment taken.

2.0 SUMMARY OF RESULTS

2.1 Student Characteristics

Career/technical students in British Columbia fall into two major categories as far as their objectives for attending a post-secondary institution are concerned. The majority of students have enrolled either "to learn the skills needed for a job" or to improve existing job skills" (see Figure 1). The former category is generally comprised of college age students (under 25 years of age), having no prior work experience related to their area of study and enrolling with the intention of completing their program on a full-time basis. The latter category, who are attending in order to improve existing job skills, usually includes adult age students, having several years

FIGURE 1
MAIN OBJECTIVE FOR ATTENDING A POST-SECONDARY INSTITUTION



of employment experience and pursuing one or two technical courses on a part-time basis rather than a full program. The proportion of this latter group who complete all requirements for graduation is lower than for the first group.

The number of students who do not fit into either of these categories is small and includes those attending "for personal interest", "to transfer to another institution" and "to decide on a career'. These students are also likely to be of college age and have limited work experience.

A comparison of "original objectives" and broad "educational goals", as stated by students upon initial entry to their program, with those stated several months after leaving their program, produced interesting results. Only 41% of the respondents stated the same objective at both points in time. Objectives stated after leaving tended to be oriented more toward the development or improvement of specific job skills, rather than more "abstract" objectives such as personal interest, completion of a certificate, or deciding on a career. Similarly, only 65% of the students indicated the same broad educational goals at both points in time. However, the changes in stated goals were quite mixed, with as many shifting from "program completion on a full-time basis" to "taking one or two courses without intending to complete a full program" as switched the other way.

Table I provides a comparison between the objectives expressed by students who enrolled in career/technical programs in 1979 (as reported in the follow-up in 1981) and those who enrolled in 1981 (as reported in 1983). There seems to be a remarkable similarity between the objectives expressed by both the college-age and adult students in the two periods. On this basis the face validity of the responses appear to be high.

Table I

MAIN OBJECTIVE FOR ATTENDING INSTITUTION
BY AGE GROUP
(In Percentages)

	College		Adult		Total	
	1981	1983	1981	1983	1981	1983
Learn Skills	44.9	41.1	21.2	22.5	29.5	28.7
Complete Certificate	8.0	10.5	11.4	13.5	10.2	12.5
Improve Existing Skills	13.5	12.8	43.3	35.5	32.8	27.9
Decide on Career	19.7	20.3	6.3	7.3	11.0	11.7
Study until Job Available	0.6	0.6	1.1	1.4	0.9	1.2
Personal Interest	7.7	7.5	15.1	15.3	12.5	12.7
Transfer to Technical Inst.	1.4	2.9	0.3	0.7	0.7	1.4
Transfer to University	3.1	2.5	1.2	1.2	1.8	1.6
Prepare for Specialized Education	0.9	1.5	0.1	2.4	0.4	2.1
Other	0.3	0.3	0.1	0.1	0.2	0.2
TOTAL (N)	1,786	1,564	3,293	3,087	5,079	4,652

2.2 Work Experience

A substantial portion of the students (59%) had work experience related to their program prior to enrolling in that program. Some 29% reported 3 or more years work experience. Males and college age students were more likely to report no work experience than were females or adult age students. A similar percentage of students (57%) indicated that they were employed full-time while enrolled during 1981/82. A further 20% reported part-time employment.

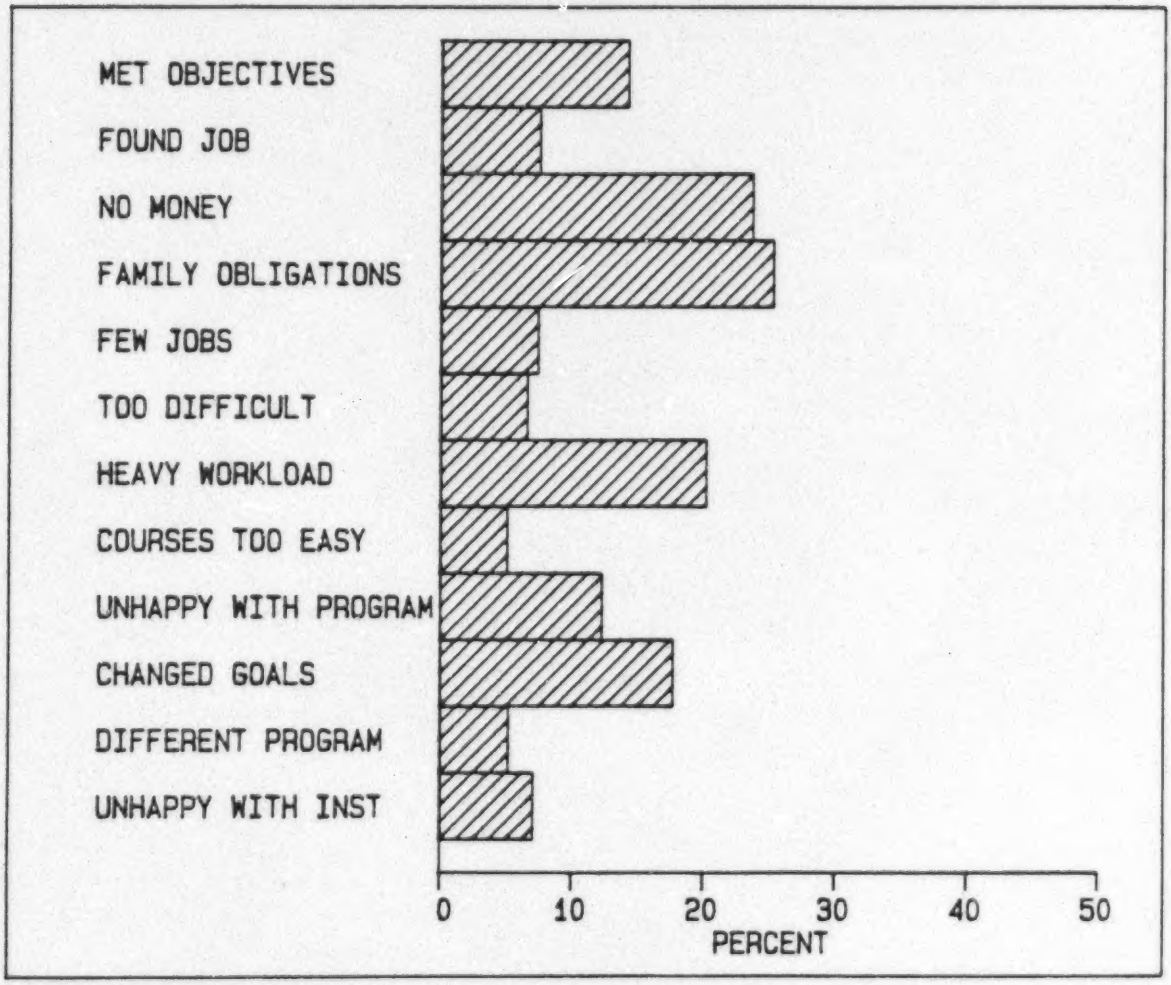
In most cases, (73%), employment undertaken by the student during their enrolment was reported to be either definitely or somewhat related to their program of study. However, where that employment was cited as unrelated, these were more likely to have been college age rather than adult age students and those employed part-time rather than full-time.

2.3 Program Completion

Program completion rates for males and college age students were higher than for females and adult age students. As might be expected, full-time students had over three times the completion rate of part-time students.

The reasons for not completing all requirements for graduation were generally either "family obligations" or "lacked adequate finances" (see Figure 2). Females and adult age students cited family obligations more frequently than males and college age students. The percentage indicating a lack of adequate finances had risen substantially from that reported for the 1979 cohort of career/technical students (up from 12% to 24%). College age students, compared with adult age students, were also more likely to report a "change of career goals" and "program not what I thought it would be" as reasons for leaving their studies before graduation.

FIGURE 2
REASONS FOR NOT COMPLETING ALL COURSE REQUIREMENTS FOR GRADUATION



2.4 Current Activity

Many students continued in a previously held job after leaving their post-secondary institution. Only 56% were actually in the position of searching for new employment. Of these 70% sought employment related to their program and 30% did not. The student who had been enrolled full-time was more likely than the part-time student to seek related employment.

Of those who eventually did find employment, many had found a job before they had actually left their post-secondary institution. For those who continued to search after leaving, 29% were employed within one month and only 3% took longer than 8 months to find employment. In total, 77% of the former students were employed at the time of the follow-up survery (see Figure 3). Those unemployed and seeking a job represented 9.5% of the respondents, up considerably from the 3.6% figure reported for the 1979 cohort of students. A comparison between the employment rates from the 1979 and the 1981 cohorts is provided in Table II. Selkirk, Northern Lights, BCIT-Day, Kwantlen and Emily Carr had unemployment rates exceeding 15%, which was higher than for all the other institutions.

The four major reasons given for not being employed were: "laid off from previous job" (26%), "full-time household/family duties" (18%), "there are no openings in my field of training" (18%), and "I am still at school" (14%). Males were more likely than females to indicate they had been laid off or that there were no openings available.

Students who had had some related work experience prior to enrolling in their program were more likely than those who had no experience to be employed full-time at the time of the survey. Similarly, so were those students who had worked full-time during their enrolment. Students with no prior work experience, non-graduates, and those who did not work during their enrolment were more likely to be unemployed at the time of the survey.

FIGURE 3
CURRENT ACTIVITY OF FORMER STUDENTS

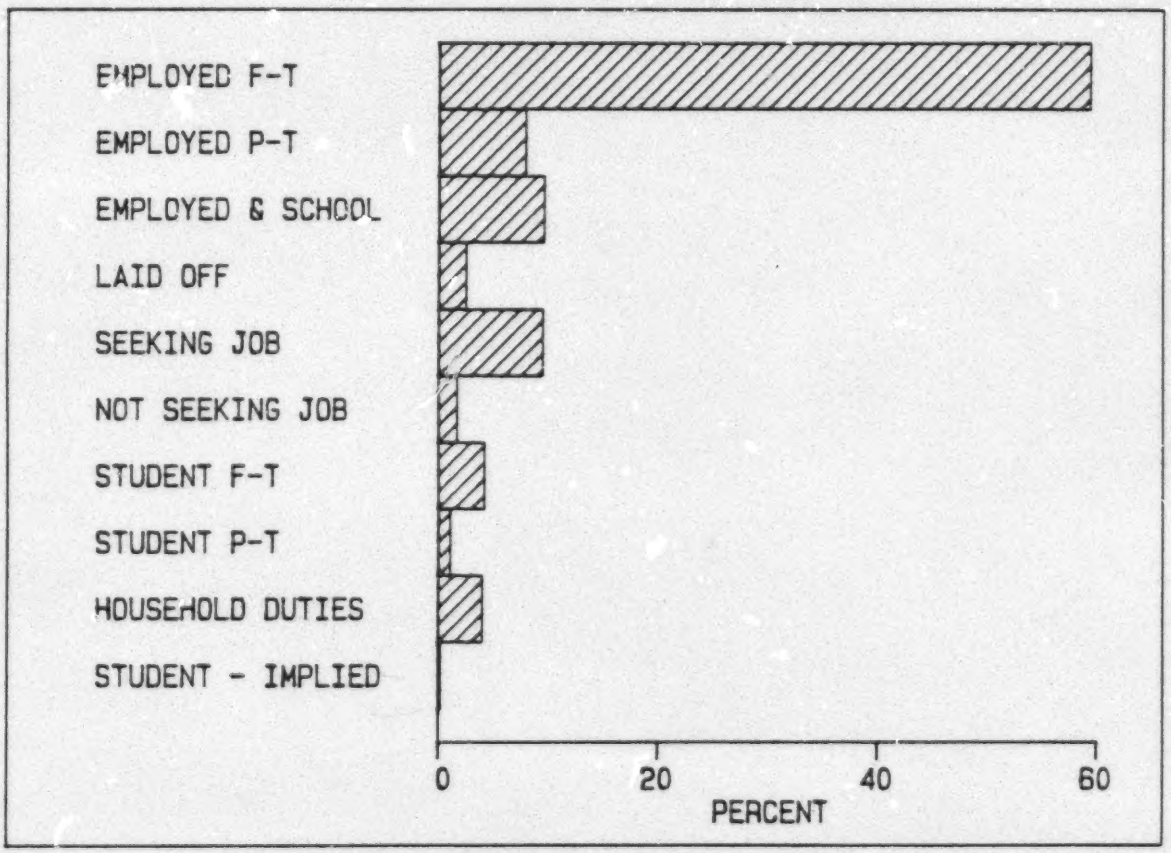


FIGURE 4
PERCENTAGE OF FORMER STUDENTS CURRENTLY UNEMPLOYED AND SEEKING A JOB

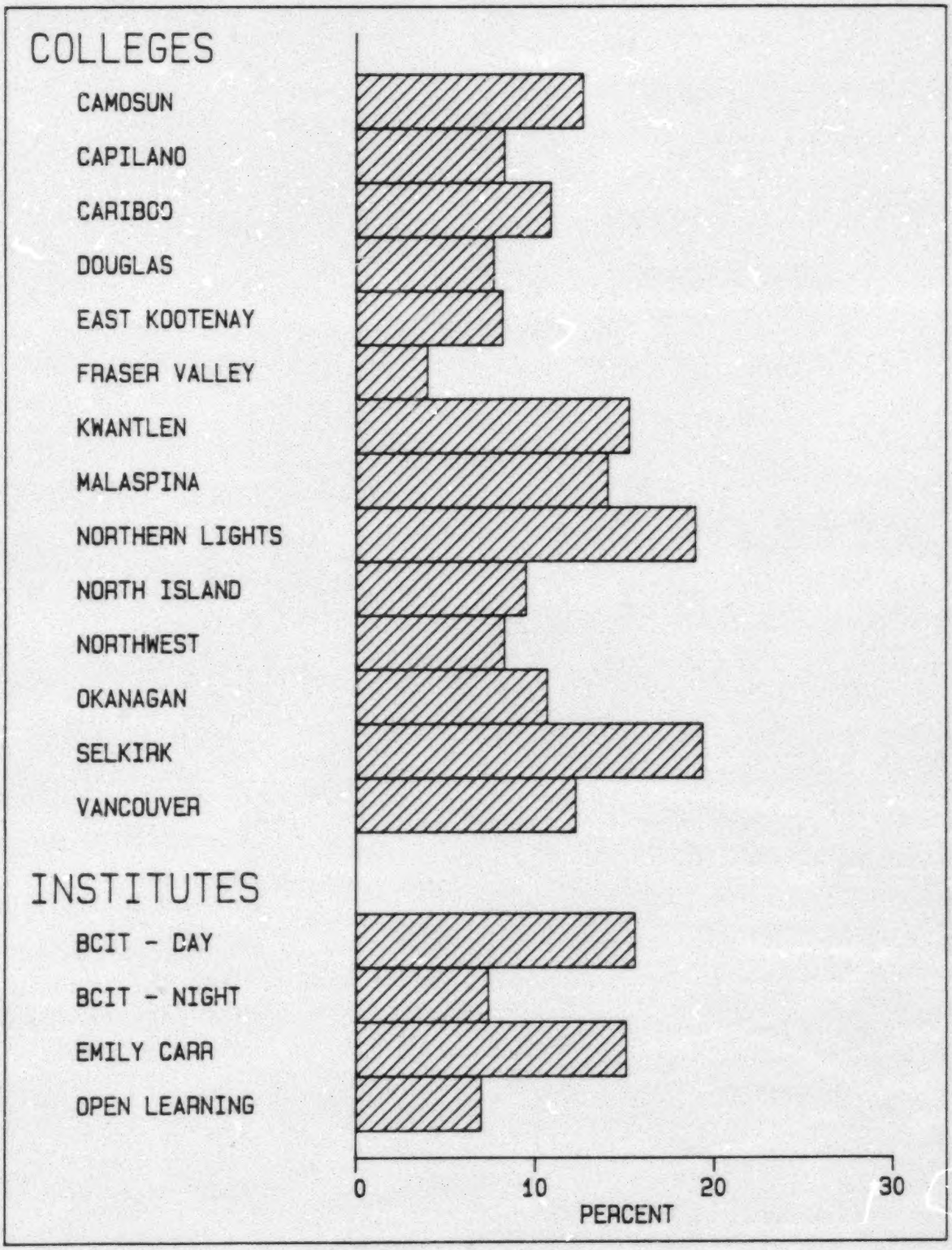


Table II

CURRENT ACTIVITY - BY SEX
(In Percentages)

	Male		Female		Total	
	1981	1983	1981	1983	1981	1983
Employed Full-Time	77.0	61.8	59.9	57.7	67.3	59.4
Employed Part-Time	2.4	4.9	8.6	10.1	5.8	7.9
Employed and Student	12.6	10.3	13.8	9.0	13.5	9.6
Student	3.7	6.6	3.1	4.3	3.2	5.5
Household/Family Duties	0.0	0.1	7.3	6.7	3.9	4.2
Unemployed but Seeking Job	3.2	10.7	3.9	8.6	3.6	9.5
Unemployed but Not Seeking Job	0.9	1.3	1.8	1.9	1.4	1.7
Other	0.2	-	0.9	-	0.7	-
Laid Off	-	4.1	-	1.3	-	2.5
TOTAL (N)	2,454	1,963	2,859	2,767	5,320	4,730

For respondents who were currently enrolled at a post-secondary institution, the majority had re-enrolled at their original institution in the same or a related discipline.

2.5 Employment

The majority (78%) of those who were employed at the time of the survey or who had been employed at some time since leaving their institution reported their training as either "very useful" or "somewhat useful" in performing their job. Only 22% indicated it was not useful and these tended to be college age students rather than adult age students.

Students were employed in all types of busnesss and industry, although the "Service" sector accounted for the most (36%). Compared with the overall B.C. workforce, students were over-represented in the Service area and under-respresented in the Trade (retail and wholesale) area. In terms of occupational categories, students were over-represented in the Managerial and Clercial occupations and under-represented in Service, Processing, Construction and Primary occupations.

The type of industry and occupational category in which the respondents were employed appeared to generally correspond to the program area in which they had been enrolled. For example, students from Renewable Resources programs were working in the Forest industry, in forestry occupations; from Non-Renewable Resource porgrams, they were employed in the mines, oil and gas industry, in engineering and electrical occupations; and from programs in Legal and Social Services or Medicine and Health, they were employed in the Service sector and in health related occupations. Only 24% of the respondents indicated there was no relationship between their employment and their training. Graduates were much more likely than non-graduates to indicate the two were "definitely related".

Females rather than males tended to be in clerical, medicine and health related occupations and in the Service industries. In contrast, males tended to be in sales, management, construction and science related occupations. Salaries reported by females were generally lower than those reported by males, as were salaries of college age respondents compared with adult age respondents.

A comparison between the occupational patterns in 1981 and 1983 revealed some interesting changes. In particular, there was a notable drop in the percentage of former students, both male and female entering the "Managerial/Administration" area. Conversely, there was an increase in the percentage of males entering the "Clerical/Sales/Service" occupations. The accompanying reduction in the "Product Fabricating" and "Construction" areas by males would seem to reflect the effects of the current economic problems. The results are summarized in Table III.

With respect to salaries earned, there is an expected increase between the 1981 and 1983 cohorts. However, the general pattern of difference between the male and female respondents, reported in 1981, is duplicated in 1983. Of further interest is the increase in the percentage of males earning less than $1,000 a month, probably a reflection of the larger percentage accepting part-time employment. A comparison of salary scales is reported in Table IV.

The primary reasons given for why students were in jobs unrelated to their training were "could not find a related job" (37%) and "my training was inadequate" (28%). Difficulty in finding a related job had been rated as the third most frequent reason by the 1979 cohort, but the 1981 cohort cited this the <u>most</u> frequent reason.

Table III

OCCUPATIONAL CATEGORY - BY SEX
(In Percentages)

CCDO No.	Occupation	Male		Female		Total	
		1981	1983	1981	1983	1981	1983
11	Managerial/Admin.	18.8	5.4	15.3	4.5	17.0	4.9
21	Natural Science (Eng/Math)	16.1	16.2	4.8	7.0	10.3	10.9
23	Social Sciences	0.9	8.6	4.4	6.9	2.7	4.3
27	Teaching	1.8	1.7	4.7	2.3	3.3	2.1
31	Medicine/Health	2.4	3.7	18.2	16.2	10.5	10.9
33	Performing Arts	2.3	3.5	1.8	2.2	2.0	2.7
37	Sports & Recreation	0.5	1.3	1.0	1.3	0.7	1.3
41	Clerical	7.2	14.2	35.4	33.4	21.5	28.3
51	Sales	10.4	14.7	6.7	9.2	8.6	11.5
61	Service	6.0	8.8	7.2	6.3	4.4	7.9
71	Farming/Horticulture	1.0	1.0	0.4	0.6	0.7	0.7
73	Fishing/Logging	2.4	3.2	0.8	0.8	1.5	1.8
77	Mining	0.4	0.7	0.0	0.0	0.2	0.3
81	Processing/Machining	3.9	5.9	0.6	0.3	2.1	2.7
85	Product Fabricating	9.2	4.2	0.4	0.1	4.7	1.8
87	Construction	6.1	5.0	0.0	0.3	3.0	2.3
91	Transportation	2.9	3.3	0.5	0.5	1.7	1.7
93	Material Handling	2.2	1.5	0.2	0.3	1.2	0.8
95	Other Crafts	1.8	3.9	0.9	1.6	1.3	2.6
99	Not Classified	3.9	1.1	0.7	0.1	2.2	0.5
	TOTAL	2,228	1,620	2,303	2,238	4,542	3,858

Table IV

PRESENT SALARY - BY SEX
(In Percentages)

Monthly Salary	Male		Female		Total	
	1981	1983	1981	1983	1981	1983
Less than $1,000	7.8	15.0	26.8	25.2	17.5	20.9
$1,000 to $1,399	21.9	14.2	35.7	21.9	29.0	18.6
$1.400 to $1,799	24.5	16.1	24.5	24.4	24.5	20.9
$1,800 or more	45.7	54.8	13.0	28.6	29.0	39.6
TOTAL (N)	2,194	1,724	2,287	2,371	4,490	4,095

2.6 Mobility

A consistent pattern emerged concerning the mobility of career/technical students. Three-quarters of the respondents indicated that they would not have moved to another region of the province if their desired program had been unavailable at their local institution or through distance education. For some institutions such as Open Learning, BCIT-Night, North Island, East Kootenay and Fraser Valley, the percentages indicated they would not move were even higher, exceeding 85% (see Figure 5).

Three quarters of the respondents from community colleges who were employed had taken jobs in their own geographic area (see Figure 6). Selkirk college stood out as the main exception, with only half employed within the Selkirk region. The pattern for the provincial institutes was unique for each institution, even though all are located in the Greater Vancouver area. BCIT-Night had 90% of its employed respondents located in the Greater Vancouver area, whereas the corresponding figure for BCIT-Day was only 60%. Emily Carr's pattern appeared similar to that of the community colleges, with approximately three-quarters employed in Greater Vancouver. The Open Learning Institute was different, however, having respondents employed all throughout the province and the Greater Vancouver area accounting for only 19%.

Two-thirds of those employed were working in the same region which they had cited upon initial entry to their career/technical program as the area of the province in which they hoped to find full-time employment. Similarly, two-thirds of those employed were working in the same region which had been their place of residence prior to enrolling.

Some 42% of the respondents indicated they would not move to another community in order to find employment related to their training. Females were much more likely than males, and adult age respondents were much more likely than college age

FIGURE 5
PERCENT OF STUDENTS WHO WOULD NOT HAVE MOVED TO ANOTHER COMMUNITY IN ORDER TO ENROL IN THEIR CAREER/TECHNICAL PROGRAM

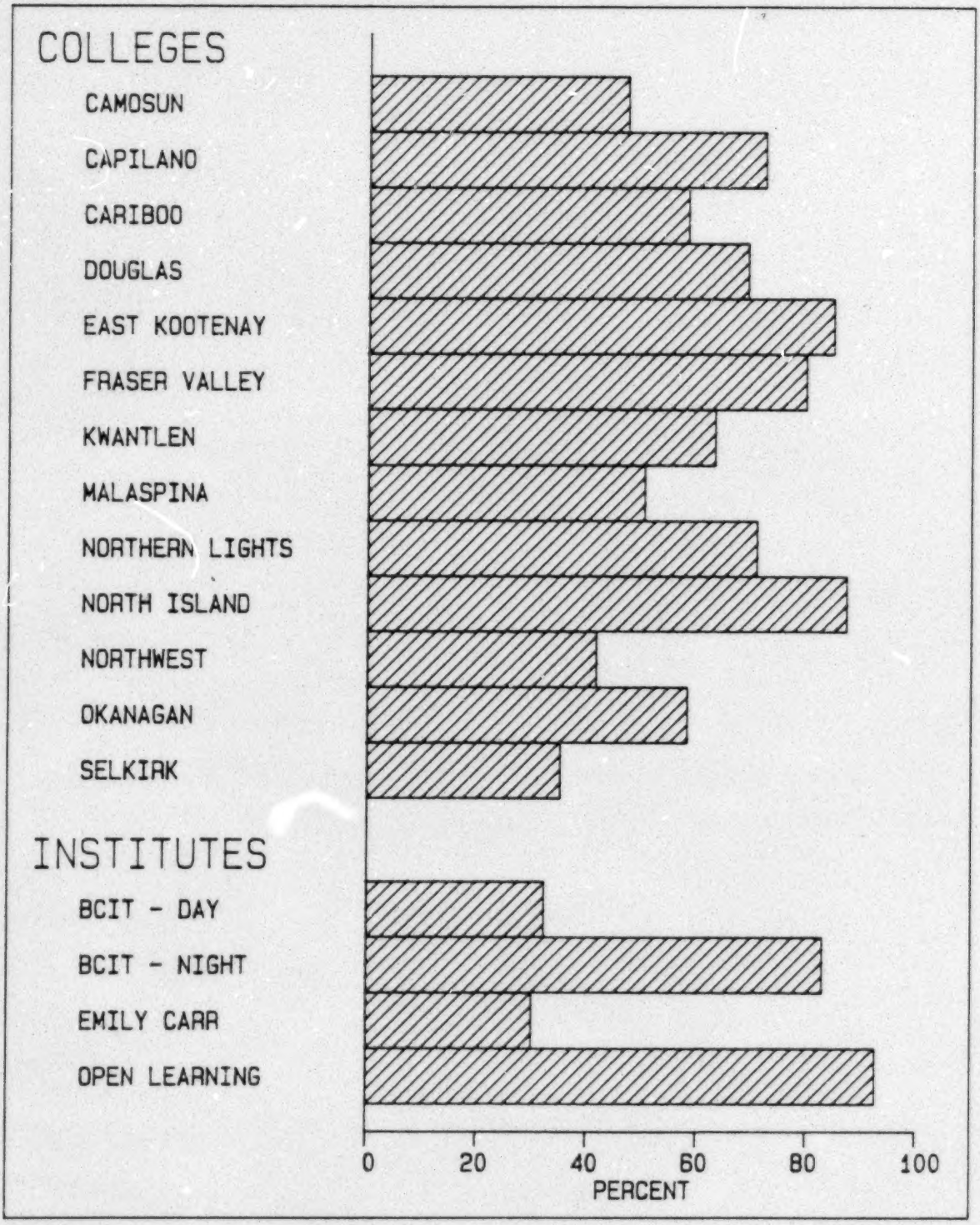
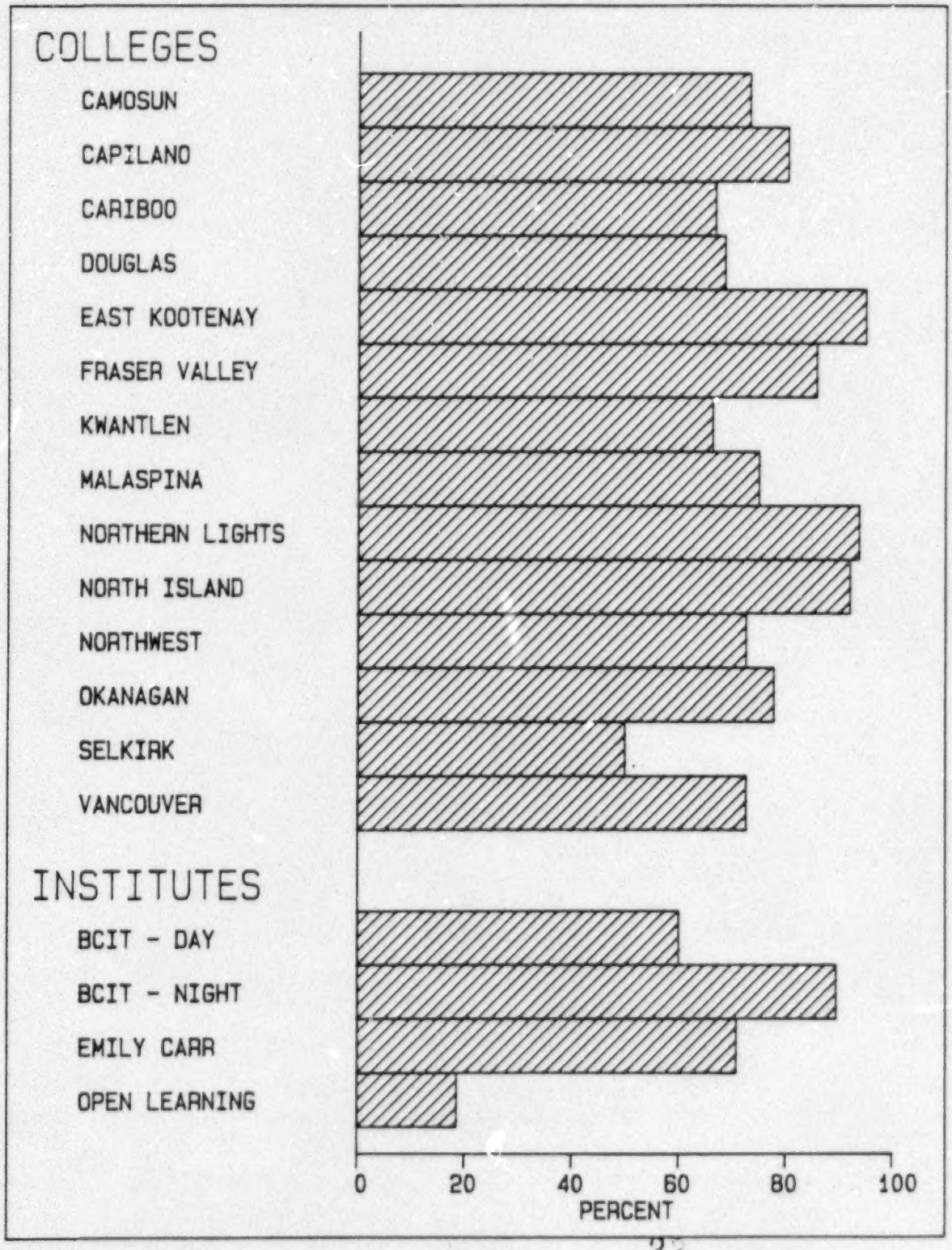


FIGURE 6
PERCENT OF EMPLOYED WORKING IN HOME REGION



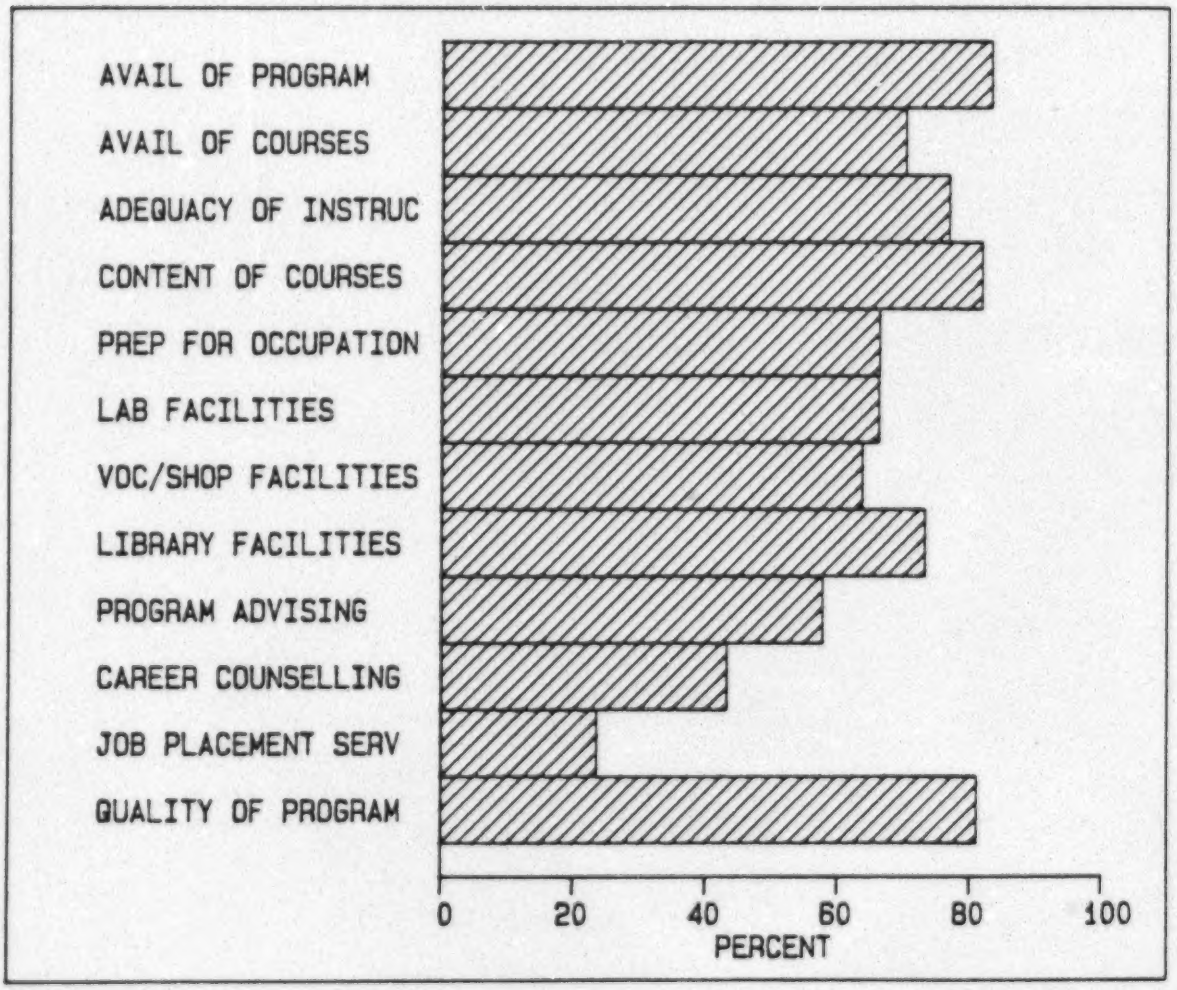
respondents to indicate they would not move. Approximately 59% of the respondents replied the same way to this question after leaving the institution as they did upon initial entry to their program. The remaining 41% changed their response, with approximately an equal number softening their answers to "yes, but depends where" as the number who took the harder line of "no".

2.7 Student Perceptions

When leaving their institution students have a tendency to overstate their initial expectations of job opportunities which they held upon entry to their post-secondary studies. This was revealed by a comparison of responses to the Entry Profile with those received from the same students in the Longitudinal Follow-Up Survey. Only 45% of the respondents recorded the same view of the job market situation on the two surveys. Many students indicated in the Follow-Up Survey that they had originally believed that jobs would be plentiful in their own geographical area upon completion of their program. However, most of these same students had, in fact, originally stated in the Entry Profile Survey that they thought jobs would be scarce. Clearly their memory of job market perspectives was more optimistic than reality.

Concerning an overall assessment of their post-secondary experience, most students reported satisfaction. For various aspects, such as the availability of programs, subject content, and overall quality of progrmas, over 80% of the respondents reported satisfaction (see Figure 7). However, in areas such as employment placement services, career counselling, and course or program advising the percentages indicating satisfaction were much lower (from 24% to 54%). Adult age students were more likely to be satisfied with subject content and over all program quality than were college age students. College age students were more likely to be satisfied with the laboratory and shop facilities than adult age respondents.

FIGURE 7
PERCENT OF FORMER STUDENTS EXPRESSING SATISFACTION WITH VARIOUS ASPECTS OF THEIR POST-SECONDARY EXPERIENCE



2.8 Future Educational Plans

Only 3% of the respondents indicated that they did not plan to take any further training and 17% reported that, although they might take the occasional course for general interest, they too were basically finished with their training. The vast majority, however, indicated that they planned to take further education.

It is interesting to note that many of the students' plans changed from the time of their entry to a career/technical program to the time of the follow-up survey. Only 50% of the respondents indicated the same intention regarding their education. Of those who had originally thought they would be finished their training upon completing the program, many have apparently re-considered and now report plans to continue their education. Of those who had originally planned further education, most have only shifted the degree of emphasis placed on these plans or have changed the field of interest.

2.9 Student Comments

Approximately 1,500 respondents offered comments ranging from a few words to several pages in length. In general, about 25% were complementary to some aspect of the institution, while another 25% were critical of one or more specific areas. The remainder were ambivalent with respect to their education, but often bitter, confused and angry with broader issues, such as the economy, employment, cutbacks and the future.

This particular set of respondents, by comparison with similar studies in previous years, were highly emotional and much more direct in their views of life and its frustrations. The comments can be generalized under the following topics.

a) Employment

There were a very large number of respondents (approximately 250) who referred to the lack of employment opportunities. Many stated quite explicitly that they had been "mislead" when beginning their program, in that they were informed jobs would be available in their specific field after graduation.[6] Apparently, jobs were not available and the number of students affected seemed to be considerable.

b) Cutbacks

A large number of comments focused on the effects of financial cutbacks upon program discontinuation,[7] filled sections, cancelled courses and inadequate facilities. The general impression was that earlier expectations had not been realized and the blame was placed upon lack of funds.

Related to the above was concern over lack of financial assistance; the costs, direct and delayed, of completing an education; and the cancellation of part-time, evening and weekend courses as part of retrenchment. The latter courses, in several students' opinions, were "first to go". The feeling seemed to be that this policy was contrary to the principle of wide access to mature and working students.

c) Standards

Comments directed at educational standards complemented those of previouse surveys. Students felt that higher levels of

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[6] Other results, however, suggest a contradiction to this comment. Students' perceptions of job opportunities would appear to have changed between initial entry to their program and their subsequent departure.

[7] Several references were made specifically to the Fire Science programs in this regard.

performance should be demanded of students and faculty. Faculty held responsible for lax standards were strongly criticized.

The concern for good teaching in its various dimensions was repeated many times. Again, expectations for quality teaching were apparently not always realized. At the same time, many respondents went into great detail in describing the excellent qualities of their teachers, the inspiration they received and the respect they held.

Counselling also received mixed responses. Generally, students expected advice on career planning, job opportunities and program expectations, but sometimes this was not forthcoming.

d) Transfer of Credits

Lack of transfer of course credits, either real or imagined, elicited a number of comments. Several specific complaints were expressed concerning lack of recognition for courses or programs at one institution by another. References were made to greater acceptance of B.C. courses in Ontario, Alberta and the United States than was the case in British Columbia.

It appeared that some students believed that they received incorrect advice on the issue of transfer of credit when they first enrolled. Particular concerns about the role of universitities in this matter were common.

e) Cooperative Education

Several comments were made regarding the value of cooperative education programs. The point seemed to have come from employers when discussing job qualifications. Some students appeared to be convinced that more action with regard to the

linking of training with the workplace by the institution was necessary. This concern was also expressed when discussing the topic of "practical versus theoretical", when applied to certain programs.

f) The Open Learning Institute

While a few comments on this subject were critical (e.g. lack of "human" contact), the great majority recited positive views regarding the opportunitites provided by this institution. In particular, the varied background of the respondents, and the even more varied motivations for taking a course, were quite interesting.

g) The Future

It seemed that a fair number of former students had given considerable thought to their futures. Some were depressed, some were resigned, while still others were optimistic about an eventual turn-around in the economy and a growth of job opportunities in their field. Compared to previous studies, more respondents seemed to be future oriented, and viewed their educational decisions as critical to their lives. The impression left was that colleges and institutes would be under continuing scrutiny for their part in preparing people for realistic careers and for the provision of sage advice on educational planning.

3.0 IMPLICATIONS

3.1 Part-Time Study

While the majority of the students (69%) were part-time, the great variation among the institutions with the respect to this statistic indicates a range of commitments to the provision of opportunities for part-time study. Several colleges (Camoson,

Selkirk and Northwest) showed a high proportion of full-time students. Conversely, other colleges displayed a more even distribution. The reasons for such a variation invite investigation. In the institute sector, the proportion of part-time students is much higher. However, Emily Carr appears to provide only limited opportunity for part-time study.

Presumably there are explanations for the disproportionate balance between part-time and full-time students at several institutions. The priority assigned to accommodating part-time students, so often expressed in literature on non-university post-secondary education, demands constant review.

3.2 Employment Levels

Regarding the current scarcity of employment opportunities, the quantitative results of the survey complemented the large number of concerns expressed in the "comments" received. Whereas, the 1979 student population showed a overall employment rate (part and full-time) of about 80% in the college sector, the equivalent figure in this study was approximately 68%. Conversely, the rates of involuntary unemployment were 5% (1979) and 13% (1981). Among the institutes the 1981 figures were 76% employed and 11% involuntarily unemployed. The most revealing statistics came from the day program at BCIT, where the employment rate between the 1979 and 1981 student groups dropped from 88% to 68% and the rate of involuntary unemployment rose from 4% to 16%.

The effects of the recession upon employment was evident throughout the province, although there were examples of even more limited opportunities in some of the interior colleges. Nor did there appear to be large variation between male and female students. The one exception was the higher rate of part-time employment among women.

It would be unwise to ignore the very serious problems which students face in finding jobs after completing training programs to qualify them for a place in the workforce. There were, however, particular programs where employment placement was high by any expectation. Therefore, colleges and institutes should pay particular attention to the employment data on a program by program basis.

Of more significance, perhaps, is the indication that about three-quarters of those who were employed had found jobs related to their training. It would be inaccurate to conclude that such a relationship is necessarily causal. However, the statistic is encouraging, particularly in the current economic climate.

In terms of salary, there still exists very wide differences between men and women. Comparison with the data reported in the survey of 1979 students suggests that the gap had narrowed only a limited extent - but it had narrowed. For reasons which are embedded in tradition or practice, the financial advantages held by males in the workforce appear to continue, albeit to a lesser degree than before. A further encouraging observation from this study is the comparable percentages of men and women in particular occupations, such as business management.

3.3 Student Views of Their Education

The consistently high approval of various aspects of the educational experience by respondents suggested that teaching, course content, laboratories, libraries, etc. were being retrained at an acceptable standard. There were, of course, considerable variations among institutions and program areas. Individual colleges and institutes should take note of these data.

However, the much lower level of satisfaction with employment-related aspects should give cause for concern. It appears that an assessment of these components of institutional services is

warranted. It is suggested that student expectations regarding career counselling and job placement services are not being met to the same high degree and some thought might be given to implications of the advice which students receive.

While institutions cannot be held responsible for the effects of the economy upon student employment prospects, it is apparent that a continuing effort should be made not to misrepresent the situation. Evidently, perhaps in understandable frustration, students place the blame upon the institutions for the disappointments which greet them in the workplace.

3.4 Student Mobility

The results of this study also reinforced the conclusion reached in previous studies with regard to the ability or desire of students to move from one region to another in pursuit of education and employment. Almost three-quarters of the respondents noted that they would not have relocated to enrol in their particular program. On a related question, the high percentage of students who reported an unwillingness to relocate for a job in their field further reflected their lack of mobility, for whatever the reasons.

In the light of discussion concerning the reallocation of programs on a provincial and/or regional basis, the data from this study warrant consideration. Untested assumptions inherent in planning exercises concerning the behavior of potential students must be carefully assessed. While the data produced in this study may have little bearing upon the planning process itself, the evident reluctance or inability of students to relocate for particular progrmas must inevitably affect the question of educational access.

3.5 Program Completion

The high percentage of students who fail to complete the courses in which they enrolled would appear to be a cause for concern. However, the explanations for this behavior are generally understandable. Financial problems and family oblications play a major role and factors associated with program difficulties are much less prominent. In particular, mature part-time students are most affected by these two major difficulties.

It may well be that certain policy changes affecting the costs of education (e.g. equitable tuition fee schedule and improved access to financial aid) would help alleviate the current situation. Part-time students are generally not given equitable treatment in these matters and this policy seems to have unfortunate consequences.

3.6 Lifelong Education

Both the comments section and the responses from questions concerning further education plans indicated that students were strongly committed to continuing their education in the future. Several students had already taken courses in three or more institutions and fewer than one in five indicated that their formal education was now complete.

The results seemed to reinforce the conventional view that the "educated" tended to take continuing advantage of further opportunities, both in and out of their own field. A large number of respondents planned to continue at their local institution or in the BCIT evening program. Universities were also popular sources of further education.

Judging from the frustrations expressed in the comments received and the behavior patterns emerging from the results, much greater efforts are needed to overcome the problems associated with

transfer of credit. From the student's view, at least, the current lack of smooth credit transfer arrangements, particularly associated with BCIT, made little sense.

4.0 FINAL COMMENT

Finally, the study revealed a number of important changes in factors associated with career/technical education in the colleges and institutes which had occurred in a two year period. In particular, problems associated with the economy (e.g. levels of employment, frustration with lack of job opportunities, and financial difficulties associated with taking education programs) have become major issues for students. Clearly it is a time of uncertainty for the colleges and institutes as even the most sophisticated manpower projections provide to be volatile.

It seems to be more critical than ever that individual institutions carefully analyze data specific to the programs they offer and to the responses of students enrolled in these programs. Priority decisions with respect to program reduction or elimination are difficult to make in any circumstances. 45owever, the kind of data made available through this study offers at least some basis for judgment.

It is likely that new programs will need to be developed while others are retrenched. Furthermore, adjustments in the area of scheduling and organizational policy are necessary to meet the changing needs of a changing student population. Governments demand increased accountability during financially difficult periods and the onus will be upon the institutions to make the case for expansion or continuation of services. In this context it is important that the institutions have access to essential data and the capacity to process it.

Despite the financial and personnel costs involved, follow-up studies such as this will be vital ingredients in the planning decisions of the future.

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